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10/830,218	04/23/2004	Parthasarathy Ranganathan	200403364-1	9362
22879 7590 12/11/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER NELSON, FREDA ANN				
ART UNIT		PAPER NUMBER		
3628				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary**Application No.**

10/830,218

Applicant(s)RANGANATHAN,
PARTHASARATHY**Examiner**

FREDA A. NELSON

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The amendment received on September 2, 2008 is acknowledged and entered. Claims 23 and 26 have been amended. No claims have been added. Claims 1-27 are currently pending.

Response to Amendments and Arguments

1. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 9 recites the limitation "source display settings" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.
4. As per claim 26, the term "some" in line 4 is indefinite. It is unclear what the number of metrics included is from the term. In addition, the claim recites the limitation, "evaluating each of the configurations
" This language suggests that there are multiple configurations.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

7. Claims 1-19 are directed to a series of steps. In order for a series of steps to be considered a proper process under § 101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). Thus, to qualify as patent eligible, these processes must positively recite the other statutory class to which it is tied (e.g., by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g., by identifying the product or material that is changed to a different state). Claims 1-19 identify neither the apparatus performing the recited steps nor any transformation of underlying materials, and accordingly are directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims rejected under 35 U.S.C. 102(e) as being anticipated by Horvitz (US PG Pub. 2004/0267600).

9. **As per claims 1 and 24**, Horvitz discloses a method and computer software for:
determining a cost metric associated with displaying information from at least one source (§ [0013]; FIGS. 1 and 4) and

determining a display configuration for displaying the information from the at least one source based at least on the metric (§ [0013]; FIGS. 1 and 4).

10. **As per claims 2 and 25**, Horvitz discloses the method and computer software of claims 1 and 24 , wherein determining a display configuration comprises:

determining a plurality of display configurations for displaying the information from the at least one source (§ [0036],[0061]);

evaluating each of the display configurations based at least on the cost metric (§ [0036],[0061]); and

selecting one of the plurality of display configurations based on the evaluation (§ [0036],[0061],[0063]).

11. **As per claims 3 and 26**, Horvitz further discloses method of claim 3 and the computer software of claim 25, wherein evaluating each of the display configurations comprises:

evaluating each of the configurations based on a plurality of metrics, the plurality of metrics including at least some of a usage metric, a power consumption metric, and a lifetime metric ((¶ [0026],[0032]-[0033],[0058],[0061])).

12. **As per claim 4**, Horvitz further discloses the method of claim 3, wherein determining the usage metric using a usage model, wherein the usage model includes an analysis of usage patterns for a display ((¶ [0038])).

13. **As per claim 5**, Horvitz further discloses the method of claim 3, wherein determining the power consumption metric using a power consumption model, wherein the power consumption model includes an analysis of power consumption data for a display ((¶ [0026])).

14. **As per claim 7**, Horvitz further discloses determining the cost metric using a cost model, wherein the cost model includes an analysis of predetermined factors associated with using the display and a relation of the factors to monetary costs (see claim 24).

15. **As per claim 8**, Horvitz further discloses the method of claim 3, wherein evaluating each of the configurations comprises using an algorithm weighting the plurality of metrics to evaluate each of the configurations (§ [0031]-[0032],[0038]).

16. **As per claim 9**, Horvitz further discloses the method of claim 2, wherein evaluating each of the configurations comprises: evaluating each of the configurations based at least on the metric and source display settings received from the at least one source (§ [0002],[0026]).

17. **As per claim 10**, Horvitz further discloses generating the display configuration on a display (§ [0008],[0026]).

18. **As per claim 11**, Horvitz further discloses the method of claim 10, wherein the at least one source comprises a plurality of sources, the method comprising:
receiving information from a plurality of sources (§ [0029],[0078]); and
the step of generating the display configuration comprises generating the display configuration, wherein the display configuration includes a plurality of windows, each window being associated with the source (§ [0002]).

19. **As per claim 12**, Horvitz further discloses the method of claim 11, wherein the step determining a metric associated with displaying information from at least one

source comprises determining a metric for each of the plurality of windows (¶ [0026],[0061]).

20. **As per claim 13**, Horvitz further discloses the method of claim 1 wherein the cost metric is associated with at least one of a cost of using a display and display operating costs for displaying the information from at least one source (¶ [0026],[0061]).

21. **As per claim 14**, Horvitz further teaches wherein the display configuration comprises a visual representation of the information from the at least one source provided on a display (¶ [0029], see claim 28).

22. **As per claim 15**, Horvitz discloses a method of displaying information on a display, the method comprising:

determining a plurality of display configurations for displaying information from at least one source using at least a metric (¶ [0036],[0061]);

evaluating each of the display configurations based at least on the metric (¶ [0036],[0061]);

selecting one of the plurality of display configurations based on the evaluation (¶ [0036],[0061],[0063]); and

providing the display configuration on the display (¶ [0002],[0008],[0012]-[0013],[0026]).

23. **As per claim 16**, Horvitz discloses the method of claim 16, further comprising:
determining the cost metric, wherein the cost metric is related to one of operational costs and cost of using the display (§ [0006],[0032]-[0033]).

24. **As per claim 17**, Horvitz discloses the method of claim 15, wherein determining a plurality of display configurations comprises:

wherein determining a plurality of display configurations for displaying information from least one source using a plurality of metrics, the plurality of metrics including at least one of a usage metric, a power consumption metric, and a lifetime metric (§ [0026],[0032]-[0033],[0058],[0061]); and

the step of evaluating each of the display configurations comprises evaluating each of the display configurations based on the plurality of metrics (§ [0026],[0032]-[0033],[0058],[0061]).

25. **As per claim 18**, Horvitz discloses the method of claim 15, wherein evaluating each of the display configurations comprises:

Ranking each of the display configurations based on a an algorithm weighting the plurality of metrics for each of the display configurations (§ [0031]-[0032],[0038]).

26. **As per claim 19**, Horvitz further teaches the method of claim 15, wherein the display configuration comprises a visual representation of the information from the at least one source provided on a display (§ [0029], see claim 28).

27. **As per claim 20**, Horvitz discloses an apparatus comprising:

means for receiving information from at least one source (¶ [0029],[0078]); FIGS. 1 and 12);

means for determining a plurality of display configurations for displaying information from the at least one source using at least a metric (¶ [0036],[0061]); and

means for selecting one of the plurality of display configurations based at least on one of the metrics (¶ [0036],[0061],[0063]).

28. **As per claim 21**, Horvitz discloses the apparatus of claim 20 wherein means for displaying the information from the at least one source in the selected display configuration ((¶ [0008],[0026]).

29. **As per claim 22**, Horvitz further discloses means for selecting one of the plurality of display configurations based on a plurality of metrics (¶ [0036],[0061],[0063]).

30. **As per claim 23**, Horvitz further discloses means for evaluating each of the display configurations using the plurality of metrics (metric (¶ [0036],[0061]).

31. **As per claim 27**, Horvitz discloses a computing system comprising:
at least one interface operable to receive information from at least one source (abstract, ¶ [0057],[0071],[0073]; FIG. 12 [1226,1238, 1236]);

a display operable to display a display configuration of the information, the display configuration being a visual representation of the information on the display (¶ [0029], see claim 28); and

a processor operable to select the display configuration from a plurality of possible display configurations of the information based on a metric associated with displaying the display configuration (¶ [0027], [0070]).

Claim Rejections - 35 USC § 103

32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

33. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz (US PG Pub. 2004/0267600), in view of Miller et al. (US Patent Number 7,3363,080).

As per claim 6, Horvitz does not explicitly disclose determining the lifetime metric using a lifetime model, wherein the lifetime model includes an analysis of lifetime data for a display.

However, Miller et al. disclose alternatively, a cost function could be applied that balances more than two important display attributes (e.g., image quality and power efficiency) and this cost function may be employed to select the proportion of each subgamut to apply (col. 19, lines 7-11). Miller et al. further disclose it is also possible to allow a display user to directly control the mixing ratio through a user interface. More

likely, a power control mechanism may be employed by the user and the present invention may be employed along with other power saving measures such as reducing display brightness, to reduce power usage or improve display lifetime at the user's discretion, wherein the user can then make tradeoffs between system attributes such as power usage, display visibility, and image quality (col. 24, lines 36-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Horvitz et al. to include the modeling of display lifetime since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Examiner's Note

Examiner cited particular pages, columns, paragraphs and/or line numbers in the references as applied to the claims above the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FREDA A. NELSON whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday and Wednesday-Friday, 8:30 AM -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. A. N./
Examiner, Art Unit 3628

/John W Hayes/
Supervisory Patent Examiner, Art Unit 3628